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 ****** HHHHHHHH SSSSSSSS? ### Status: Signing onto Dialog *******
ENTER PASSWORD:
 ***** HHHHHHHH SSSSSSS? ******
Welcome to DIALOG
### Status: Login successfulDialog level 05.24.00D
Last logoff: 27jan09 08:23:33
Logon file405 20feb09 09:27:09
           *** ANNOUNCEMENTS ***
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***File 321, PLASPEC now known as Plastic Properties Database
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Menu System II: D2 version 1.8.0 term=ASCII

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- 1. Announcements (new files, reloads, etc.)
- 2. Database, Rates, & Command Descriptions
- 3. Help in Choosing Databases for Your Topic
- 4. Customer Services (telephone assistance, training, seminars, etc.)
- 5. Product Descriptions

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*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

- 1. Announcements (new files, reloads, etc.)
- 2. Database, Rates, & Command Descriptions
- 3. Help in Choosing Databases for Your Topic
- 4. Customer Services (telephone assistance, training, seminars, etc.)
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\$0.00 Estimated cost FileHomeBase

\$0.02 TELNET

\$0.02 Estimated cost this search

\$0.02 Estimated total session cost 0.277 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1926-2009/Feb W3

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File 24:CSA Life Sciences Abstracts 1966-2009/Apr
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        44: Aquatic Science & Fisheries Abstracts 1966-2009/May
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 File 65:Inside Conferences 1993-2009/Feb 19
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  File 98:General Sci Abs 1984-2009/Jan
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  File 143:Biol. & Agric. Index 1983-2009/Dec
         (c) 2009 The HW Wilson Co
  File 144: Pascal 1973-2009/Feb W2
         (c) 2009 INIST/CNRS
  File 154:MEDLINE(R) 1990-2009/Feb 16
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for information.
  File 155:MEDLINE(R) 1950-2009/Feb 17
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*File 155: Medline has been reloaded. Please see HELP NEWS 154
for information.
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         (c) 2009 Elsevier B.V.
  File 185:Zoological Record Online(R) 1864-2009/Mar
         (c) 2009 The Thomson Corp.
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         (c) 2009 Thomson Reuters
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  File 467:ExtraMED(tm) 2000/Dec
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      Set Items Description
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           (Item 1 from file: 357)
DIALOG(R) File 357: Derwent Biotech Res.
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0320853 DBR Accession No.: 2003-21993 PATENT
Preserving phenotype of cultured cell such as fibrocytes, useful as tissue
```

transplants comprises, culturing cells with extracellular matrix of annulus fibrosis harvested from living or recently deceased human or

animal - fibrocyte cell culture for transplantation, cell therapy or gene therapy

AUTHOR: FERREE B A

PATENT ASSIGNEE: FERREE B A 2003

PATENT NUMBER: US 20030026788 PATENT DATE: 20030206 WPI ACCESSION NO.: 2003-596337 (200356)

PRIORITY APPLIC. NO.: US 253211 APPLIC. DATE: 20020924 NATIONAL APPLIC. NO.: US 253211 APPLIC. DATE: 20020924

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Preserving (M) the phenotype of a cultured cell, involves harvesting cells to be cultured from a suitable donor, harvesting the extracellular matrix (ECM) of the annulus fibrosis from a living or recently deceased human or animal, and culturing the cells along with portions of the ECM to preserve the phenotype of the cultured cell. BIOTECHNOLOGY - Preferred Method: (M) further comprises transplanting the cultured cells into or onto a vertebral disc. (M) further comprises adding one or more therapeutic substances (including culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications or immunosuppressive medications) to the cell culture. Antiinflammatory; Immunosuppressive; Hepatotropic; Nephrotropic; Cardiant. No supporting data provided. MECHANISM OF ACTION - Gene therapy; Cell therapy. USE - (M) is useful for preserving the phenotype of a cultured cell such as fibrocytes, chondrocytes or nucleus pulposis cells (claimed). The cultured cell is useful in annulus fibrosis augmentation and/or transplantation, for treating intervertebral disc, or other tissues of the body such as meniscus of the knee, or to repair or replace other tissues or organs of the body such as the pancreas, liver, kidney, or heart. (3 pages)

DESCRIPTORS: human fibrocyte, chondrocyte, nucleus pulposis cell culture, phenotype evaluation, preservation, extracellular matrix, appl. pancreas, liver, kidney, heart transplantation, cell therapy, gene therapy, vulnerary act. animal mammal tissue engineering (22, 37)

SECTION: THERAPEUTICS-Tissue Culture/Engineering-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis;
DISEASE-Cardiovascular-DISEASE-Liver; DISEASE-Kidney-DISEASE-Other Diseases; THERAPEUTICS-Gene Therapy

AUTHOR: FERREE B A

...ABSTRACT: is useful for preserving the phenotype of a cultured cell such as fibrocytes, chondrocytes or nucleus pulposis cells (claimed). The cultured cell is useful in annulus fibrosis augmentation and/or transplantation...

DESCRIPTORS: human fibrocyte, chondrocyte, nucleus pulposis cell culture, phenotype evaluation, preservation, extracellular matrix, appl. pancreas, liver, kidney, heart transplantation, cell...

1/9,K/2 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0293597 DBR Accession No.: 2002-15444 PATENT

Treating diseased/traumatized intervertebral disc, comprises harvesting nucleus pulposus cells of healthy disc and extracellular matrix from deceased animal, combining them and transplanting engineered pulposus into disc - transplantation and tissue engineering for disc disease

therapy

AUTHOR: FERREE B A

PATENT ASSIGNEE: FERREE B A 2002

PATENT NUMBER: US 6352557 PATENT DATE: 20020305 WPI ACCESSION NO.:

2002-314694 (200235)

PRIORITY APPLIC. NO.: US 638727 APPLIC. DATE: 20000814 NATIONAL APPLIC. NO.: US 638727 APPLIC. DATE: 20000814

LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Treating a diseased or traumatized intervertebral disc (D) having a nucleus and annulus fibrosis, comprising harvesting nucleus pulposus (NP) cells, cells that differentiate into NP-like cells or live cells that function like NP cells from a healthy (D), and extracellular matrix (EM) of NP from a recently deceased animal, combining C1 and EM to produce engineered NP (P), and transplanting (P) into (D), is new. DETAILED DESCRIPTION -INDEPENDENT CLAIMS are also included for the following: (1) preparing an engineered NP, by harvesting NP cells, cells that differentiate into like cells or live cells that function like cells of the NP, from a healthy (D), harvesting EM from a recently deceased human or animal, combining NP and EM to produce an engineered NP, and keeping the engineered NP viable until transplantation or use; and(2) an engineered pulposus (I) prepared by the above method. BIOTECHNOLOGY - Preferred Method: The treatment method further involves morselizing the engineered NP, forming a passageway through the annulus fibrosis, and Method: The transplanting the engineered NP into the disc through the passageway. The method further involves adding one or more therapeutic substances the engineered NP, including culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The harvested cells are kept viable until being placed into the disc to be treated. ACTIVITY - Analgesic. No supporting data is given. MECHANISM OF ACTION - Cell therapy. USE - The method is useful for treating a disease or traumatized intervertebral disc having a nucleus and annulus fibrosis (claimed). Living nucleus pulposus cells combined with nucleus pulposus extracellular matrix restore disc function and eliminate pain in patients with disc disease. ADMINISTRATION - The cells or engineered tissues are administered through any surgical including percutaneous or laproscopic technique approaches, particularly, the engineered tissue is morselized and injected into the disc with a needle and syringe or through a small cannula (claimed). Dosage not specified. ADVANTAGE - The risk for premature wear-out of disc function is minimized. EXAMPLE - None given in the source material.(4 pages)

DESCRIPTORS: deceased, living animal nucleus pulposus differentiation, extracellular matrix, transplantation, appl. tissue engineering, diseased, traumatized nucleus, annulus fibrosis intervertebral disc therapy analgesic (21, 44)

 ${\tt SECTION: THERAPEUTICS-Tissue \ Culture/Engineering-DISEASE-Other \ Diseases}$

Treating diseased/traumatized intervertebral disc, comprises harvesting nucleus pulposus cells of healthy disc and extracellular matrix from deceased animal, combining them and transplanting...

AUTHOR: FERREE B A

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Treating a diseased or traumatized intervertebral disc (D) having a nucleus and annulus fibrosis, comprising harvesting nucleus pulposus (NP) cells, cells that differentiate into NP-like cells or live cells that function...

... USE - The method is useful for treating a disease or traumatized intervertebral disc having a nucleus and annulus fibrosis (claimed). Living nucleus pulposus cells combined with nucleus pulposus extracellular matrix restore disc function and eliminate pain in patients with disc disease. ADMINISTRATION...

DESCRIPTORS: deceased, living animal nucleus pulposus differentiation, extracellular matrix, transplantation, appl. tissue engineering, diseased, traumatized nucleus, annulus fibrosis intervertebral disc therapy analgesic (21, 44)

1/9,K/3 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0287422 DBR Accession No.: 2002-09269 PATENT
Treating degenerative disc disease by combining living, invertebral disc cells with type-specific collagen-glycosaminoglycan extracellular matrices and transplanting them into a patient to restore disc function and eliminate pain - intervertebral disk cell culture, collagen-glycosaminoglycan extracellular matrix, growth factor and differentiation factor for tissue engineering and disease therapy
AUTHOR: FERREE B A
PATENT ASSIGNEE: FERREE B A 2002
PATENT NUMBER: US 6340369 PATENT DATE: 20020122 WPI ACCESSION NO.:

2002-146856 (200219)

PRIORITY APPLIC. NO.: US 638726 APPLIC. DATE: 20000814 NATIONAL APPLIC. NO.: US 638726 APPLIC. DATE: 20000814 LANGUAGE: English

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Methods for treating diseased or traumatized intervertebral disc (having a nucleus and annulus fibrosis), comprising harvesting and culturing living, invertebral disc cells, combining them with type-specific collagen-glycosaminoglycan extracellular matrices and transplanting them into a patient with disc disease to restore disc function and eliminate pain, are new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) a method (I) of treating a diseased or traumatized intervertebral disc having a nucleus and annulus fibrosis, comprising: (a) harvesting live, intervertebral disc cells; (b) combining the harvested cells with an analogue of the extracellular matrix to produce an engineered disc tissue; and (c) transplanting the engineered disc tissue into the disc; (2) a method (II) of treating a diseased or traumatized intervertebral disc, comprising: (a) harvesting live cells from a human or animal donor; and (b) transplanting the harvested cells into the disc being treated while the harvested cells are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus fibrosis like cells); (3) an engineered disc tissue (III) prepared via (I) (which further comprises keeping the engineered disc tissue viable until use); (4) a method (IV) of preparing engineered intervertebral disc tissue for subsequent transplantation, comprising: (a) harvesting live cells from a human or animal donor wherein, following transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and (ii) at least some of the cells differentiate into annulus fibrosis like cells; (b) combining the nucleus pulposus like cells with type II

collagen-glycosaminoglycans; and (c) combining the annulus fibrosis like cells with type I collagen-glycosaminoglycans; (5) engineered intervertebral disc tissue (V) prepared according to the method (V); (6) a method (VI) of preparing engineered intervertebral disc tissue, comprising: (a) harvesting live cells from a human or animal donor; and (b) transplanting the harvested cells into the disc being treated while the harvested cells are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus fibrosis like cells; and (c) combining the harvested cells with analoque of the extracellular matrix; and (7) engineered intervertebral disc tissue (VII) prepared according to the method (VI). BIOTECHNOLOGY - Preferred Methods: In (I) the harvested cells are: (1) pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) annulus fibrosis cells, precursors of annulus fibrosis cells, or cells capable of differentiating into annulus fibrosis cells and the harvested cells are transplanted into the annulus fibrosis of the disc. The methods (I) and (II) further comprise: (a) morselizing the engineered disc tissue; (b) forming a passageway through the annulus fibrosis; and (c) transplanting the engineered disc tissue into the disc through the passageway. The methods (I) and (II), further comprise adding one or more therapeutic substances to the engineered disc tissue, such as culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The step of transplanting the engineered disc tissue into the disc comprises: (i) injecting the engineered disc tissue into the disc through a needle and syringe or small cannula; and (ii) percutaneously or laparoscopically injecting the engineered disc tissue into the disc being treated. The method (I) further comprises keeping the harvested cells viable until placed into the disc being treated. The analogues of the extracellular matrix in (I) and (II) include collagen-glycosaminoglycans. Method (I) may further comprise keeping the engineered disc tissue viable until use. The method (II) further comprises: (1) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (2) combining the annulus fibrosis like cells with type I collagen-glycosaminoglycans. The method (II) may further comprise: (a) combining the harvested cells with an analogue of the extracellular matrix to create an engineered disc tissue; and (b) transplanting the engineered disc tissue into the disc being treated. The constituents are morselized, and further includes one or more therapeutic substances, such as culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The analogues of the extracellular matrix include collagen-glycosaminoglyca ns. In method (VI) the therapeutic substances include one or more of the following: culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. Preferred Disc Tissues: For the engineered disc tissue (III), the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) are annulus fibrosis cells, precursors of annulus fibrosis cells, or cells capable of differentiating into annulus fibrosis cells and the harvested cells are transplanted into the annulus fibrosis of

the disc. The intervertebral disc tissue (VI) further comprises one or more therapeutic substances, such as culture media, growth factors, factors, hydrogels, differentiation polymers, anti-inflammatory medications, or immunosuppressive medications. The intervertebral disc tissue (VII), further includes one or more therapeutic substances. ACTIVITY - Osteopathic. No biological data given. MECHANISM OF ACTION - None given. USE - The methods and disc tissues may be used for the treatment of diseased or traumatized intervertebral discs and degenerative disc diseases. ADMINISTRATION -The cells or engineered tissues may be introduced using any surgical technique, including percutaneous or laparoscopic approaches. As one delivery mechanism, a passageway may be formed through the annulus fibrosis, with the cells or engineered disc tissue being introduced into the disc through the passageway. In particular, the engineered disc tissue may be morselized and injected into the disc with a needle and syringe or through a small cannula. ADVANTAGE - The treatment of degenerative disc disease has previously relied on eliminating the defective disc or disc function. This may be accomplished by fusing the vertebra on either side of the disc. In terms of replacement, most prior-art techniques use synthetic materials to replace the entire disc or a portion of it. Unfortunately, disc replacement using synthetic materials does not restore normal disc shape, physiology, or mechanical properties. Synthetic disc replacements tend to wear out, resulting in premature failure. The problems associated with the wear of prosthetic hip and knees are well known to those skilled in orthopedic surgery. The future of treating degenerative disc disease therefore lies in treatments which preserve disc function. If disc function could be restored with biologic replacement or augmentation, the risk of premature wear out would be minimized, if not eliminated. The methods are used for treating a diseased or traumatized intervertebral discs using natural, engineered tissue as opposed to synthetic materials. Live, intervertebral disc cells are harvested from a patient, cultured, and transplanted while still viable into the affected disc. In the preferred embodiment, the cultured cells are transferred and grown on an analogue of the extracellular matrix to yield an engineered disc Collagen-glycosaminoglycans preferably provide though extracellular matrix, existing alternative yet-to-be-developed analogues may be substituted. Depending upon the target region of the recipient, the cells preferably differentiate into nucleus pulposus like cells, annulus fibrosis like cells, or both. To assist in differentiation, the nucleus pulposus like cells may be combined with type II collagen-glycosaminoglycans, and the annulus cells fibrosis like may be combined with type collagen-glycosaminoglycans. EXAMPLE - No examples given. (4 pages) DESCRIPTORS: intervertebral disk cell culture, type-specific collagen-glycosaminoglycan extracellular matrix, nucleus pulposus, annulus fibrosis-like cell differentiation, artificial disk tissue transplantation, growth factor, differentiationfactor, hydrogel, polymer, antibiotic, antiinflammatory, immunosuppressive medication, appl. traumatized intervertebral disk disease therapy, tissue engineering artificial organ osteopathic (21, 31)

SECTION: THERAPEUTICS-Tissue Culture/Engineering-DISEASE-Other Diseases

AUTHOR: FERREE B A

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Methods for treating diseased or traumatized intervertebral disc (having a nucleus and annulus fibrosis), comprising harvesting and culturing living, invertebral disc

cells, combining them with type...

- ... following: (1) a method (I) of treating a diseased or traumatized intervertebral disc having a nucleus and annulus fibrosis, comprising: (a) harvesting live, intervertebral disc cells; (b) combining the harvested cells...
- ... are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus...
- ...or animal donor wherein, following transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and (ii) at least some of the cells differentiate into annulus fibrosis like cells; (b) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (c) combining the annulus fibrosis like...
- ... are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus...
- ... according to the method (VI). BIOTECHNOLOGY Preferred Methods: In (I) the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) annulus fibrosis cells, precursors of annulus fibrosis cells, or...
- ... the engineered disc tissue viable until use. The method (II) further comprises: (1) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (2) combining the annulus fibrosis like...
- ... medications. Preferred Disc Tissues: For the engineered disc tissue (III), the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) are annulus fibrosis cells, precursors of annulus fibrosis cells...be substituted. Depending upon the target region of the recipient, the cells preferably differentiate into nucleus pulposus like cells, annulus fibrosis like cells, or both. To assist in differentiation, the nucleus pulposus like cells may be combined with type II collagen-glycosaminoglycans, and the annulus fibrosis...
- DESCRIPTORS: intervertebral disk cell culture, type-specific collagen-glycosaminoglycan extracellular matrix, nucleus pulposus, annulus fibrosis-like cell differentiation, artificial disk tissue transplantation, growth factor, differentiationfactor, hydrogel, polymer...
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DIALOG(R) File 144: Pascal
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  14939066 PASCAL No.: 01-0090200
  Diagnosing spinal osteomyelitis : A comparison of bone and Ga-67
scintigraphy and magnetic resonance imaging
  LOVE Charito; PATEL Mahendra; LONNER Baron S; TOMAS Maria B; PALESTRO
Christopher J
  Division of Nuclear Medicine, Long Island Jewish Medical Center, New Hyde
Park, New York, United States; Division of Neuroradiology, Long Island
Jewish Medical Center, New Hyde Park, New York, United States; Department
of Orthopedic Surgery, Long Island Jewish Medical Center, New Hyde Park,
New York, United States
  Journal: Clinical nuclear medicine, 2000, 25 (12) 963-977
  ISSN: 0363-9762 CODEN: CNMEDK Availability: INIST-16903;
354000093411820020
  No. of Refs.: 19 ref.
  Document Type: P (Serial) ; A (Analytic)
  Country of Publication: United States
 Language: English
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The objective of this investigation was to compare the Purpose: accuracies of bone and Ga-67 scintigraphy and magnetic resonance imaging (MRI) for diagnosing spinal osteomyelitis and to determine the optimal radionuclide approach to this disorder. Methods: Twenty-two patients, with 24 sites of possible spinal osteomyelitis, who underwent three-phase bone scintigraphy with SPECT, Ga-67 scintigraphy with SPECT, and MRI with and without contrast were included in this retrospective review. Bone scans were interpreted as three-phase studies, delayed planar images alone, delayed planar plus SPECT, and SPECT alone (to identify uptake patterns). Sequential bone/ Ga-67 images were interpreted as planar and as SPECT studies. Planar and SPECT Ga-67 images were also interpreted alone. Precontrast MRI studies were used to identify osteomyelitis, whereas postcontrast images were used to identify soft tissue infection. Results: Eleven sites of spinal osteomyelitis were identified. Tracer uptake in two contiguous vertebrae, as noted on SPECT, was the most accurate bone scan criterion for detecting spinal osteomyelitis (71%). SPECT bone/Ga-67 was significantly more accurate (92%) than both planar bone/Ga-67 (75%) and bone SPECT (P = 0.15 and P = 0.2, respectively). SPECT Ga-67 was as accurate as SPECT bone/Ga-67 and as sensitive as MRI (91%); the radionuclide study was slightly but not significantly more specific (92% vs. 77%) than MRI. Of 11 sites of extraosseous infection, 10 were identified on MRI, 9 on SPECT Ga-67,7 on planar Ga-67, and none on bone scintigraphy. Conclusions: Spinal osteomyelitis and accompanying soft tissue infection can be diagnosed accurately with a single radionuclide procedure: SPECT Ga-67. This procedure can be used as a reliable alternative when MRI cannot be performed and as an adjunct in patients in whom the diagnosis is uncertain.

English Descriptors: Osteitis; Spine; Diagnosis; Emission tomography; Gallium; Nuclear magnetic resonance imaging; Indication; Comparative study; Human

Broad Descriptors: Diseases of the osteoarticular system; Bone disease; Radionuclide study; Medical imagery; Systeme osteoarticulaire pathologie; Osteopathie; Exploration radioisotopique; Imagerie medicale; Sistema osteoarticular patologia; Osteopatia; Exploracion radioisotopica; Imageneria medical

French Descriptors: Osteite; Rachis; Diagnostic; Tomoscintigraphie; Gallium; Imagerie RMN; Indication; Etude comparative; Homme

Classification Codes: 002B24B08

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LOVE Charito; PATEL Mahendra; LONNER Baron S ; TOMAS Maria B; PALESTRO Christopher ${\sf J}$

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 \dots on planar Ga-67, and none on bone scintigraphy. Conclusions: Spinal osteomyelitis and accompanying soft tissue infection can be diagnosed accurately with a single radionuclide procedure: SPECT Ga-67. This procedure...

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